



## POLYETHYLENE BAGS MGS-90-06H

**1.0 Description.** These specifications cover the requirements for polyethylene bags for various uses.

**2.0 Materials.** Polyethylene bags shall meet the following requirements for the type specified in the bid request.

### **2.1 General.**

**2.1.1** Polyethylene bags manufactured using 100 percent "Super Hexene" linear low density polyethylene resin will be permitted as a substitute for the specified mil thickness. The thickness of bags manufactured using "Super Hexene" may be 1.0 mil less than that specified for the average and minimum thickness.

**2.1.2** Other linear low density polyethylenes or other "equivalent strength" bags will not be accepted with less thickness than specified, as a substitute for the specified mil thickness.

**2.1.3** When measured in accordance with NBS Product Standard PS 17-19, or latest revision, the average thickness and the minimum thickness at any point shall not be less than that specified.

**2.1.4** All bags shall have a flat bottom seal.

**2.1.5** The manufacturer shall provide a certification with the bid quotation stating that the polyethylene resin is first run (virgin) material or contains recycle. If recycled, the percentage of recycle material is to be stated. The certification shall also include the type of linear low density polyethylene resin, if any, used in the manufacture of the bags.

**2.2 Type I Bags.** Type I polyethylene bags are for various uses.

**2.2.1** The bags shall be clear in color.

**2.2.2** The average thickness shall be 4 mils with no point less than 3.2 mils.

**2.2.3** Bags for use as liners for soil, cement, and other materials shall have a finish size of 6 inches width x 20 inches height ( $\pm 1/4$  inch in either direction).

**2.2.4** Bags for use in covering concrete cylinders and other uses shall have a finish size of 12 inches width x 21 inches length ( $\pm 1/2$  inch in either direction).

**2.2.5** Bags for use as liners for aggregates and other materials shall have a finish size of 14 inches width x 29 inches length ( $\pm 1/2$  inch in either direction).

**2.2.6** Bags with other specified length and width dimensions shall have a tolerance of  $\pm 1/2$  inch in either direction.

**2.3 Type II Bags.** Type II polyethylene bags are for trash bags and other uses.

**2.3.1** Paper covered wire ties shall be furnished with these bags.

**2.3.2** The color of the bags shall be as specified in the bid request.

**2.3.3** The finish size shall be 28 inches width by 35 inches length ( $\pm$  1/2 inch in either direction).

**2.3.4** Unless otherwise specified, the average thickness shall be 3 mils with no point less than 2.4 mils.

**2.3.5** When biodegradable polyethylene trash bags are specified in the bid request, the bags shall meet the material and thickness requirements of Section 2.4.2 and 2.4.5 of this specification.

**2.3.6** The logo shown below shall be imprinted in black ink across one side of each bag, centered in both the width and length with a tolerance of + or - 1/4 of an inch. The total height of the logo shall be 14 inches (+/- 1/4 inch) and the total width shall be 16 inches (+/- 1/4 inch). As shown below, the logo is to have a 7 and 1/2 inch high (+/- 1/4 inch) by 7 and 1/2 inch wide (+/- 1/4 inch) State of Missouri symbol with three printed lines. The first two lines shall be placed approximately 3 inches from the top of the State of Missouri symbol and shall state "No MORE Trash" with 5 dots around the letter R and a graphical piece of trash located in the H, all as below. The capital letters shall be 3 and 1/2 inch tall (+/- 1/4 inch) and 3/8 inch thick (+/- 1/16 inch). The lowercase letters shall be 2 and 3/4 inch tall (+/- 1/4 inch) and 3/8 inch thick (+/- 1/16 inch). The graphical piece of trash located in the H shall be approximately 1 and 1/4 inch by 1 and 1/2 inch and shall be as shown in Figure 1. The letters M, O and a portion of the R in the first line shall be a negative image within the State of Missouri symbol, as shown below. The third line shall be placed approximately 2 inches below the second line and shall state "nomoretrash.org". The letters shall be 1 inch tall (+/- 1/4 inch) and 1/4 inch thick (+/- 1/16 inch).



**2.3.7** The plastic film of the bag is to be treated for ink retention with the ink to be formulated for use on the plastic bag. The logo ink shall be permanent black ink that will not transfer, run, peel, or fade during storage or use of the printed bag.

**2.3.7** The bags shall be furnished in perforated rolls.

**2.4 Type III Bags.** Type III bags are for drum liners and other uses.

**2.4.1** The color shall be natural.

**2.4.2** The average thickness shall be 3.75 mils with no point less than 3.0 mils.

**2.4.3** The finish size of the bags for 55 gallon drums shall be 38 inches width by 65 inches length ( $\pm 5/8$  inch in either direction).

**2.4.4** The finish size of the bags for 20 gallon drums shall be 28 inches width by 38 inches length ( $\pm 5/8$  inch in either direction).

**2.4.5** When biodegradable polyethylene drum liner bags are specified in the bid request, the bags shall be made of biodegradable polyethylene film from polyethylene resins and the proper cornstarch additives to achieve a film containing 6 percent cornstarch. The manufacturer shall furnish a certification with the bid quotation that the bags are biodegradable and contain 6 percent cornstarch.

**2.4.6** The bags shall be packaged in rolls.

**3.0 Packaging.** As stated for type.

**3.1** Packages or rolls of bags shall not exceed 50 pounds in net weight. Packages or rolls shall be clearly labeled with the number of bags and approximate package weight.

**4.0 Acceptance.** Acceptance of polyethylene sample bag liners purchased under these specifications will be based on visual examination and any tests deemed necessary by the department.

**5.0 Ordering.** Polyethylene bags are to be ordered by type, size, and color (if desired).